APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,295	08/02/2001	David W. Payton	HRL055	5644

28848   7590   09/09/2005

TOPE-MCKAY & ASSOCIATES
23852 PACIFIC COAST HIGHWAY #311
MALIBU, CA 90265

EXAMINER
BUI, BING Q

ART UNIT	PAPER NUMBER
2642	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/921,295	PAYTON ET AL.
	Examiner	Art Unit	
	Bing Q. Bui	2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-99* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-99* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/12/02 & 12/9/02*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-99 are pending in the application for examination, wherein claims 1, 38

and 75 being independent.

Drawings

2.   The drawings in figures 1 and 2 are objected to because the drawings do not

show legends explaining the number shown the drawing. A proposed drawing

correction or corrected drawings are required in reply to the Office Action to avoid

abandonment of the application. The objection to the drawings will not be held in

abeyance.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-99 are rejected under 35 U.S.C. 102(b) as being anticipated by Proctor,

Jr. et al (US Pat No. 5,687,196) cited by Applicant, herein after referred as Proctor.

Regarding claim 1, referring to figures 1-4, Proctor teaches a agent (e.g. element

10) for receiving signals from at least one other locally spaced agent (e.g., element 12),

the agent comprising:

      a.   at least one signal receiver for receiving a strength signal having a signal strength from at least one other locally spaced agent (see col. 4, ln 57-col. 5, ln 19);

      b.   at least one data receiver for receiving a data signal including data from at least one other locally spaced agent (see col. 4, ln 57-col. 5, ln 19);

      c.   means for associating each data signal with a strength signal, where the data signal and the strength signal associated are from the same other locally spaced agent (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19); and

      d.   means for selecting a data signal based on its associated strength signal (see col. 3, ln 39-col. 4, ln 4).

Regarding claim 2, referring to figures 1-4, Proctor teaches the agent as set forth in claim 1, wherein the signal receiver and the data receiver are each directional receivers and wherein the means for selecting selects a data signal based on its associated strength and an associated signal direction (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 3, referring to figures 1-4, Proctor teaches the agent as set forth in claim 2, wherein the directional receivers determine direction by receiving digital signals in angular regions (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 4, referring to figures 1-4, Proctor teaches the agent as set forth in claim 3, wherein the angular regions may be selectively combined to allow for different angular accuracy in the determination of the direction from which a digital signal was received (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 5, referring to figures 1-4, Proctor teaches the agent as set forth

in claim 1, wherein the agent further comprises a means for approximating a distance

from which the strength signal has traveled based on the signal strength of the strength

signal (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 6, referring to figures 1-4, Proctor teaches the agent as set forth

in claim 1, wherein the signal receiver and the data receiver are incorporated as a single

receiver (see col. 4, ln 57-col. 5, ln 19).

Regarding claim 7, referring to figures 1-4, Proctor teaches the agent as set forth

in claim 6, wherein the strength signal and the data signal are combined into a message

signal including a signal strength and data (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln

57-col. 5, ln 19).

Regarding claim 8, referring to figures 1-4, Proctor teaches the agent as set forth

in claim 7, wherein the agent is configured for receiving the message signal in the form

of a digital data packet having a data portion with at least one element (see col. 4, ln 57-

col. 5, ln 19).

Regarding claim 9, referring to figures 1-4, Proctor teaches the agent as set forth

in claim 8, further comprising:

a.   a digital processor connected with the receiver for receiving the digital

data packet (see col. 4, ln 57-col. 5, ln 19);

b.   an analog to digital converter connected with the receiver and with the

digital processor for digitizing the signal strength and for providing the digitized signal

strength to the digital processor (see col. 4, ln 57-col. 5, ln 19); and

c.   a memory connected with the processor for storing digital data packets

(see col. 4, ln 57-col. 5, ln 19).

Regarding claim 10, referring to figures 1-4, Proctor teaches the agent as set

forth in claim 9, wherein the agent further comprises a means for time stamping

received digital data packets and for storing the time stamped received digital data

packets in memory along with the digital data packets (see col. 4, ln 57-col. 5, ln 19).

Regarding claim 11, referring to figures 1-4, Proctor teaches the agent as set

forth in claim 10, wherein the means for selecting the data signal selects a message

based on at least one element selected from the group consisting of the digital data

packet, the signal strength, and the time stamp (see col. 4, ln 57-col. 5, ln 19).

Regarding claim 12, referring to figures 1-4, Proctor teaches the agent as set

forth in claim 9, wherein the means for selecting the data signal selects a message

signal based on its digital data packet and signal strength (see col. 3, ln 39-col. 4, ln 4;

and col. 4, ln 57-col. 5, ln 19).

Regarding claim 13, referring to figures 1-4, Proctor teaches the agent as set

forth in claim 10, further comprising a means for checking the validity of received digital

data packets, and wherein digital data packets found invalid are removed from the

memory (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 14, referring to figures 1-4, Proctor teaches the agent as set

forth in claim 13, wherein the signal receiver and the data receiver are each directional

receivers and wherein the means for selecting selects a data signal based on its

associated signal strength and an associated signal direction (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 15, referring to figures 1-4, Proctor teaches the agent as set forth in claim 14, wherein the directional receivers determine direction by receiving digital signals in angular regions (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 16, referring to figures 1-4, Proctor teaches the agent as set forth in claim 15, wherein the angular regions are represented as bins in the memory, wherein the bins may be selectively combined to allow for different angular accuracy in the determination of the direction from which a digital signal was received (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 17, referring to figures 1-4, Proctor teaches the agent as set forth in claim 13, wherein the agent is configured for receiving the message signals of different types, and wherein the means for selecting is operated independently for signals of each type (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 18, referring to figures 1-4, Proctor teaches the agent as set forth in claim 13, wherein the agent is configured to receive message signal including digital data packets each including at least one cumulative data portion, and wherein the agent further comprises a means for modifying the cumulative data portion (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 19, referring to figures 1-4, Proctor teaches the agent as set forth in claim 18, wherein the agent further comprises a means for generating local data,

and wherein the means for modifying the cumulative data portion of the digital data packets uses the local data for modifying the cumulative data portion (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 20, referring to figures 1-4, Proctor teaches the agent as set forth in claim 18, wherein the means for selecting the data signal selects a message based on at least one element selected from the group consisting of the digital data packet, the signal strength, the time stamp, and the cumulative data portion of the digital packets (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 21, referring to figures 1-4, Proctor teaches the agent as set forth in claim 20, wherein the agent is configured for receiving the message signals of different types, and wherein the means for selecting is operated independently for signals of each type (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 22, referring to figures 1-4, Proctor teaches the agent as set forth in claim 20, wherein the cumulative data portion includes a cumulative strength measure, and wherein means for modifying the cumulative data portion of the digital packets uses the signal strength from the strength signal to modify the cumulative strength measure (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 23, referring to figures 1-4, Proctor teaches the agent as set forth in claim 22, wherein the signal receiver and the data receiver are each directional receivers and wherein the means for selecting selects a data signal based on its associated strength and an associated signal direction (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 24, referring to figures 1-4, Proctor teaches the agent as set forth in claim 23, wherein the directional receivers determine direction by receiving digital signals in angular regions (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 25, referring to figures 1-4, Proctor teaches the agent as set forth in claim 24, wherein the angular regions are represented as bins in the memory, wherein the bins may be selectively combined to allow for different angular accuracy in the determination of the direction from which a digital signal was received (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 26, referring to figures 1-4, Proctor teaches the agent as set forth in claim 25, further comprising a transmitter connected with the processor for transmitting a digital signal including a digital packet to at least one other locally spaced agent (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 27, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, further comprising a means for detecting when the same signal just transmitted by the transmitter is received back in the receiver in order to detect reflection from objects near the agent and a means for determining the signal strength of the signal and for using the signal strength to approximate the distance of an object from the agent (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 28, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, wherein the receivers are selected from the group consisting of optical

receivers, acoustic receivers, and radio frequency receivers (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 29, referring to figures 1-4, Proctor teaches the agent as set forth in claim 29, wherein the receivers are infrared receivers (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 30, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, wherein the transmitters are directional transmitters (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 31, referring to figures 1-4, Proctor teaches the agent as set forth in claim 30, wherein the directional transmitters transmit by sending signals in angular regions (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 32, referring to figures 1-4, Proctor teaches the agent as set forth in claim 31, wherein the angular regions into which the transmitters transmit are represented as bins in the memory, wherein the bins may be selectively combined to allow for different angular breadth for the signal transmission (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 33, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, wherein the transmitters are selected from the group consisting of optical receivers, acoustic receivers, and radio frequency receivers (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 34, referring to figures 1-4, Proctor teaches the agent as set forth in claim 34, wherein the transmitters are infrared transmitters (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 35, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, wherein the transmitter is configured to transmit a signal including a data packet including the modified cumulative data portion of the selected signal (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 36, referring to figures 1-4, Proctor teaches the agent as set forth in claim 26, wherein the transmitted signals have transmission strengths, and wherein the transmitter may be configured to vary the transmission strength (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

Regarding claim 37, referring to figures 1-4, Proctor teaches the agent as set forth in claim 36, wherein the data packet transmitted further includes a data packet including information regarding the transmission strength of the transmitted signals whereby the means for selecting an agent receiving the signal can account for the altered signal strength of the signal when selecting among signals (see col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19).

As to claims 38-99, they are rejected for the same reasons set forth to rejecting claims 1-37 corresponding to col. 3, ln 39-col. 4, ln 4; and col. 4, ln 57-col. 5, ln 19.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following patents are cited to further show the state of the art in general:

U.S. Pat. No. 4,710,944

U.S. Pat. No. 5,390,166
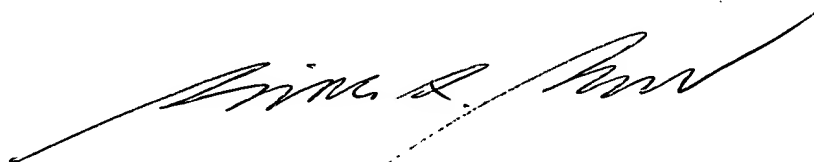
U.S. Pat. No. 6,490,350

U.S. Pat. No. 6,700,538

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Bing Bui whose telephone number is (571) 272-7482.

The examiner can normally be reached on Monday through Thursday from 7:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ahmad Matar, can be reached on (571) 272-7488. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-8300

and for formal communications intended for entry (please label the response

□EXPEDITED PROCEDURE□) or for informal or draft communications not intended for

entry (please label the response "PROPOSED" or "DRAFT").

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (571) 272-

2600.

05 Sep 2005

BING Q. BUI
PRIMARY EXAMINER